WHAT IS CLAIMED IS:

- A DNA segment encoding a mammalian GDF-1 protein, or an epitope specific thereto, or a DNA fragment complementary to said DNA segment.
- 2. The DNA segment according to claim 1 wherein said GDF-1 protein has the sequence as defined in Figure 2, 11A or 11B.
- 3. The DNA segment according to claim 1 wherein said mammal is a mouse, hamster or human.
- substantially free of proteins with which it is naturally non-covalently associated or an epitope specific thereto.
 - 5. The protein according to claim 4 which is unglycosylated.
 - 6. The protein according to claim 4 wherein said mammal is a mouse, hamster or human.
 - 7. The protein according to claim 4 wherein said protein is chemically synthesized.
 - 8. The protein according to claim 4 wherein said protein has a sequence as defined in Figure 2, 11A or 11B, or functionally equivalent variation thereof.
 - 9. A recombinantly produced GDF-1 protein having the amino acid sequence given in Figure 2, 11A or 11B, or functionally equivalent variation thereof.

- 10. The protein according to claim 9 wherein said protein is unglycosylated.
- M. A recombinant DNA molecule comprising:
- i) said DNA segment according to claim 1;
 - ii) a vector.
- 12. A host cell stably transformed with said recombinant DNA molecule according to claim 11.
- 13. The host cell according to claim 12 wherein said cell is a procaryotic cell.
- 14. The host cell according to claim 12 wherein said cell is a eucaryotic cell.
- 15. A method of producing a recombinant GDF-1 protein, or functionally equivalent variation thereof, comprising culturing said host cell according to claim 12 under conditions such that said segment is expressed and said GDF-1 protein thereby produced, and isolating said GDF-1 protein.
- 16. A DNA segment encoding a mammalian UOG-1 protein, or an epitope specific thereto, or a DNA fragment complementary to said DNA segment.
- 17. A mammalian UOG-1 protein substantially free of proteins with which it is naturally non-covalently associated, or an epitope specific thereto.
- 18. A recombinantly produced UOG-1 protein having the amino acid sequence given in

Figure 11A or 11B, or functionally equivalent variation therof.

- 19. A recombinant DNA molecule comprising:
- i) said DNA segment according to claim 16; and
 - ii) a vector.
- 20. A host cell stably transformed with said recombinant DNA molecule according to claim 19.
- 21. A method of producing a recombinant UOG-1 protein, or functionally equivalent variation thereof, comprising culturing said host cell according to claim 20 under conditions such that said segment is expressed and said UOG-1 protein thereby produced, and isolating said UOG-1 protein.